

Neue Features in InterSystems IRIS (4H) 2025.x

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Agenda



01 Allgemeines

02 Analytics & AI

03 Developer Experience / Interop

04 SQL & Data Management

05 Speed, Scale, Security

06 Sonstiges

Never change a running system?



Höchste Zeit für ein Upgrade!



Alte "Neue Features" aus 2024

- Columnar Storage
- Columnar Index
- Funktion \$vector und SQL-Datentyp VECTOR
- Foreign Tables
- SQL-WITH Klausel
- SQL JSON_TABLE Funktion

Individuelle Upgrade Checkliste



The screenshot shows a web browser window with the URL `docs.intersystems.com/upgrade/?product=iris&versionFrom=2024.1.1&versionTo=2025.1.1&categories=Business%20Intelligence,Cloud,Core,Development%20Tools,Driver%20Technologies,Embedded%20Python,External%20L...`. The page title is "InterSystems Upgrade Impact Checklist". Below the title, there is a paragraph explaining the form's purpose: "This form helps you assess the impact of upgrading to a new version of your InterSystems product. To see a list of changes that may impact the code, configuration, or operation of your system after the upgrade, simply select your product and enter the versions from which and to which you are upgrading. The relevant changes will appear below." Another paragraph mentions that InterSystems publishes items of immediate importance to users of its software, including alerts, mission-critical issues, important updates, fixes, and release announcements. It provides links to <https://www.intersystems.com/support-learning/support/product-news-alerts/> and <https://www.intersystems.com/support/product-alerts-advisories>. The form itself is titled "Data Platform Instance Details" and contains four dropdown menus: "Product" (set to "InterSystems IRIS Data Platform"), "Version From" (set to "2024.1.1"), "Version To" (set to "2025.1.1"), and "Audience" (set to "All"). Below these is a section titled "Data Platform Features Used" with a "Select/Deselect All" button. This section is divided into several categories, each with a list of features and checkboxes: "Core Features" (Core, Security), "Analytics" (Business Intelligence, Machine Learning, Natural Language Processing), "Application Development" (Development Tools, Driver Technologies, Embedded Python, External Languages, Web Applications), "Scalability" (Mirroring, Sharding), "Data Management" (SQL), "Other" (Monitoring), "Cloud Operations" (Cloud), and "Interoperability" (FHIR, Interoperability). At the bottom left of the form is a "Generate Upgrade Checklist" button. On the right side of the form, there is a vertical "Feedback" button. A large blue banner at the bottom right of the screenshot contains the URL `docs.intersystems.com/upgrade`.

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InterSystems Upgrade Impact Checklist

This form helps you assess the impact of upgrading to a new version of your InterSystems product. To see a list of changes that may impact the code, configuration, or operation of your system after the upgrade, simply select your product and enter the versions from which and to which you are upgrading. The relevant changes will appear below.

From time to time, InterSystems publishes items of immediate importance to users of our software. These include alerts, mission-critical issues, important, upgrades, fixes, and release announcements. You can obtain the most current list at <https://www.intersystems.com/support-learning/support/product-news-alerts/>. InterSystems recommends that you subscribe to receive notifications about support alerts, critical issues, fixes and product releases at <https://www.intersystems.com/support/product-alerts-advisories>

Data Platform Instance Details

Product **Version From** **Version To** **Audience**

InterSystems IRIS Data Platform 2024.1.1 2025.1.1 All

Data Platform Features Used

Select/Deselect All

Core Features

- ☒ Core
- ☒ Security

Analytics

- ☒ Business Intelligence
- ☒ Machine Learning
- ☒ Natural Language Processing

Application Development

- ☒ Development Tools
- ☒ Driver Technologies
- ☒ Embedded Python
- ☒ External Languages
- ☒ Web Applications

Scalability

- ☒ Mirroring
- ☒ Sharding

Data Management

- ☒ SQL

Other

- ☒ Monitoring

Cloud Operations

- ☒ Cloud

Interoperability

- ☒ FHIR
- ☒ Interoperability

Generate Upgrade Checklist

Feedback

docs.intersystems.com/upgrade

Veraltete und abgekündigte Funktionen



The screenshot shows the InterSystems IRIS Data Platform documentation page for version 2025.2. The page is titled "Deprecated and Discontinued Features" and provides information on features that are no longer supported or have been discontinued. The left sidebar contains a navigation menu with links to various documentation sections, including "Supported Platforms", "Releases and Prerelease Software", "Licensing", "Downloading Samples", "Deployment", "Administration", "Architecture", and "Security". The main content area includes a search bar, a table of contents, and a list of deprecated and discontinued features. A blue callout box at the bottom right of the page contains the text: "Siehe Release Notes unter docs.intersystems.com".

InterSystems IRIS Data Platform 2025.2

Deprecated and Discontinued Features

This topic lists features deprecated features in InterSystems IRIS®; it also lists any features that are discontinued or removed.

About Deprecated and Discontinued Technologies and Features

From time to time, InterSystems stops further development of a technology when newer and better options are available. However, product support for these capabilities continues in the same way that it does for products beyond our [Minimum Supported Version](#).

Deprecated designates a feature or technology that InterSystems no longer actively develops and for which better options exist. Deprecated items should not be used for new development. The *deprecated* designation indicates that customers should plan to eliminate use of the feature or technology. InterSystems maintains the staff expertise to support *deprecated* product capabilities.

Discontinued designates a feature or technology that is no longer viable for use, even in existing applications. InterSystems feels that continued use of such technology is a risk for our customers. The reasons for this include but are not limited to:

- Usage has declined to a small number of customers.
- The feature has become incompatible with current technologies or security practice.
- Incompatibilities between the feature or technology and our current product implementation make application maintenance prohibitive.
- The feature or technology depends on discontinued content from a third party.

MultiValue

As of version 2025.1, MultiValue is deprecated. InterSystems will no longer recommend MultiValue for new applications. Support will continue to be provided for releases older than [Minimum Supported Version](#).

While there are no immediate plans to remove MultiValue from the product, customers should plan to migrate to a supported technology. If you have questions about your current or planned use of MultiValue, please contact your InterSystems account manager.

System Alerting and Monitoring

Is this page helpful?

Contents

- About
- MultiValue
- System Alerting & Monitoring
- Studio
- Public Key Infrastructure
- Cloud Manager
- IRIS NLP
- Private Web Server (PWS)
- UIMA
- Spark Connector
- Atelier
- Shadowing
- Zen
- Zen Reports

[Feedback](#)

[Class Reference](#)

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Veraltete und eingestellte Funktionen

- MultiValue (2025.1)
- SAM (12/2004)
- **Studio (2024.2)**
- Public Key Infrastructure (2024.1)
- InterSystems Cloud Manager (2023.3)
- IRIS NLP (2023.3)
- **Private Web Server (2023.2)**
- UIMA-Integration (2023.1)
- Spark Connector (2022.1)
- Atelier (2021.1)
- Shadowing (2019.1)
- Zen, Zen Reports (2019.1)

Neue Features



The screenshot displays the InterSystems IRIS 2025.2 documentation page. The left sidebar contains a navigation menu with 'Release Information' expanded, showing a list of release notes from 2019.1 to 2025.2. The main content area is titled 'New in InterSystems IRIS 2025.2' and includes a search bar, a 'Contents' table of contents, and a 'Feedback' button. The page text describes the new features, enhancements, and other significant updates in the 2025.2 release, which is a continuous delivery (CD) release. It also provides links to 'Known Issues and Notes' and 'Upgrade Impact Checklist'. A blue callout box at the bottom right contains the text: 'Siehe Release Notes unter docs.intersystems.com'.

InterSystems IRIS Data Platform 2025.2

2025.2

Release Information

About...

Release Notes

New in 2025.2

New in 2025.1

New in 2024.3

New in 2024.2

New in 2024.1

New in 2023.3

New in 2023.2

New in 2023.1

New in 2022.3

New in 2022.2

New in 2022.1

New in 2021.2

New in 2021.1

New in 2020.1

New in 2019.1

Known Issues and Notes

Deprecated & Discontinued

Supported Platforms

Class Reference

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AskMe (beta)

Is this page helpful?

Contents

Release Information

Speed, Scale, and Security

Analytics and AI

SQL and Data Management

Database Operations

Modernizing Interoperability User Interface

Feedback

New in InterSystems IRIS 2025.2

This page describes the new features, enhancements, and other significant updates in the 2025.2 release of InterSystems IRIS® data platform, which is a [continuous delivery \(CD\) release](#).

For other information you may wish to consider related to changes included in this release, see [Known Issues and Notes](#). For a more exhaustive list of the changes included in this release, refer to the [Upgrade Impact Checklist](#).

Release Information for 2025.2

The current release is 2025.2. The posting for 2025.2 is build 2025.2.0.227.0.

Enhancing Speed, Scale, and Security

New security database

Upgrading to InterSystems IRIS 2025.2 will move security data from the IRISYS database into the IRISSECURITY database. New installations also store their security data in IRISSECURITY.

Among other things, this change removes direct access to security globals, updates privileges for security APIs (these now require %DB_IRISYS-R and %Admin_Secure:U), and restricts SQL queries on security data. **Customers should thoroughly test their applications prior to upgrade.**

You can use the new %SecurityAdministrator role for general security administration tasks.

InterSystems recommends encrypting IRISSECURITY.

For a detailed overview of these changes, see <https://community.intersystems.com/post/advisory-irissecurity-intersystems-iris-20252> or [IRISSECURITY Upgrade Impact](#).

IMPORTANT:

This is a major incompatible change to a core component of the platform. It is imperative that you thoroughly test your software before upgrading. For more information, see [Support](#).

OAuth2 authentication

This release introduces several features to improve the user experience of configuring OAuth2.

Siehe Release Notes unter docs.intersystems.com

Analytics & AI



- Vector Search Erweiterungen
 - Neuer Datentyp EMBEDDING (2024.3)
 - SQL Funktion EMBEDDING() (2024.3)
 - Approximate Nearest Neighbor Index (ANN) (2025.1)
 - ANN Performance Optimierungen (2025.3)
- BI Cube Building Updates (2025.1 & 2025.2)
 - %BuildCube and %SynchronizeCube
 - Analyse von Cube-Abhängigkeiten, Konsistenz
 - Cube Manager, Logging

Developer Experience



- Direkte Distribution von Client-Bibliotheken
 - Java - Maven
 - .NET - NuGet
 - Python - PyPI
- Embedded Python
 - Flexible Python Runtime (≥ 3.9)
 - Python wird nicht mehr mit IRIS mitgeliefert (BYOP)
 - Keine separate IRIS ML-Version mehr
 - WSGI Web App Support (Flask, Django)

Interoperabilität

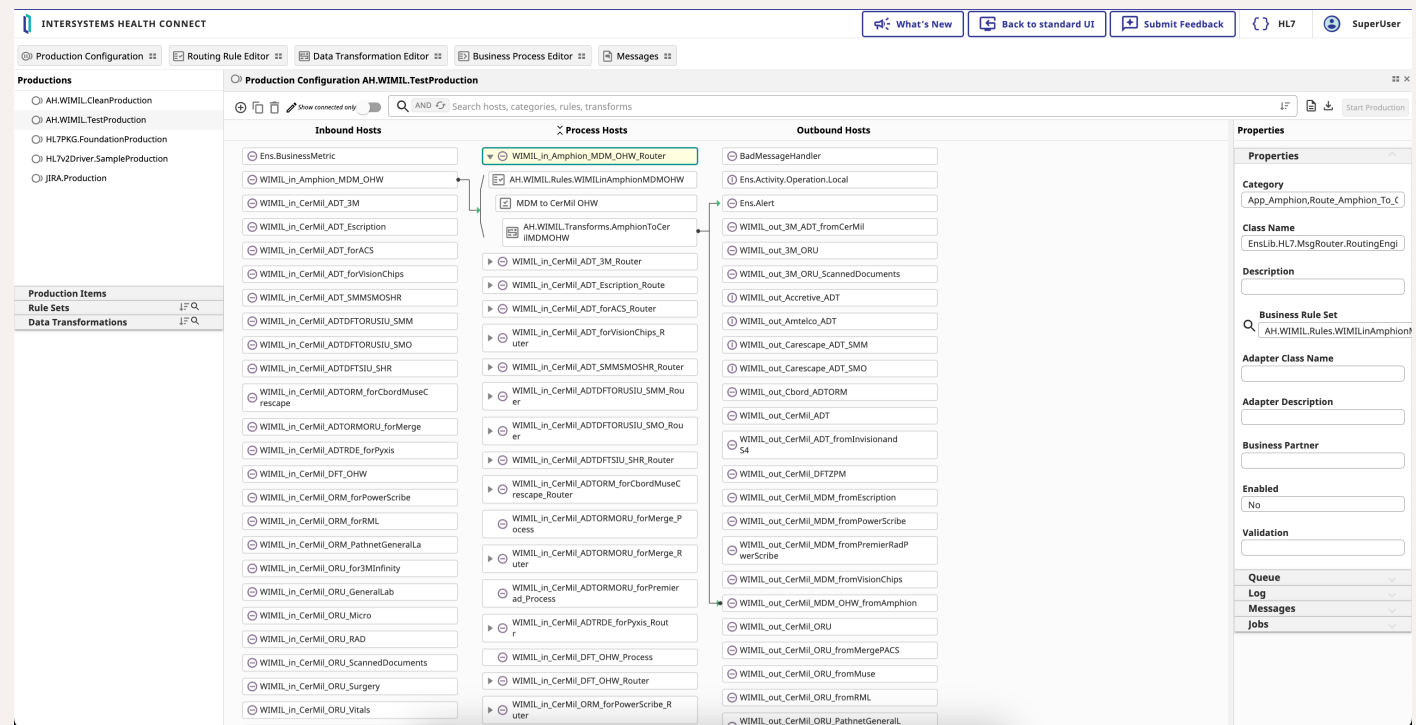


- Resend Messages im Visual Trace (2024.3)
- Erweiterte Funktionen des Regeleditors (2024.3)
 - Filter, Auto Scroll, Large Rule Sets
- Python Support im DTL-Editor (2025.1)
- Neue Skalierbarkeit trotz FIFO (2025.3)
 - FIFO Message Grouping erlaubt Poolgröße > 1
- Neues UI für Productions und DTL-Editor (2025.1-3)
 - Flexibles umschalten zwischen den UIs

Interoperabilität – Neue Production-Konfiguration



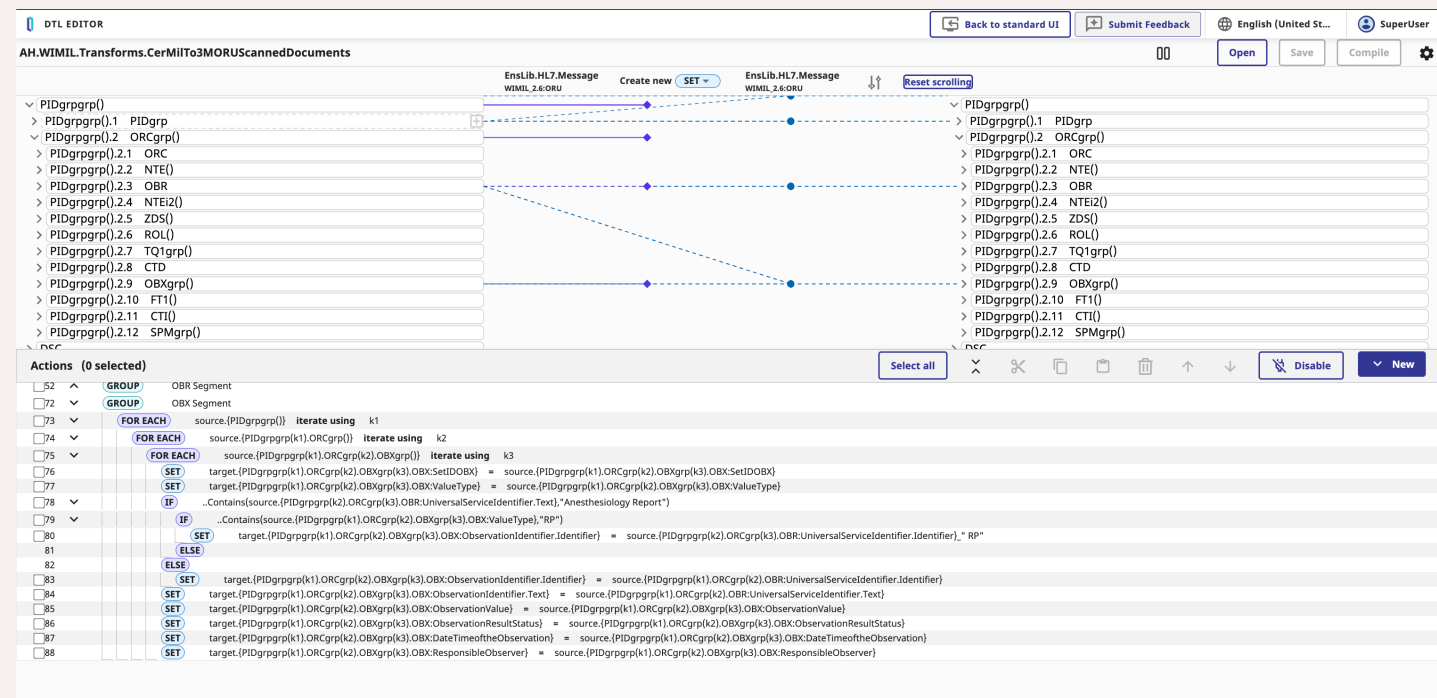
- **Multi-Screen Ansichten:**
Produktions Konfig, DTLs & Routing Regeln
 - *Split-Screen und Full Screen Modus*
- Bei Auswahl des eingehenden Hosts wird der **vollständige Pfad** angezeigt (vorher nur direkte Verbindungen)
- **Darstellungsoptionen/Erweiterungen**
 - *Umfangreiche Filter Optionen*
- **Suchen in der Produktion**
 - *Durchsucht alle Hosts auf Komponentenebene nach dem Suchstring*
- **Und mehr**



Interoperabilität – Neuer DTL-Editor



- **Auto-Vervollständigung** auf Feldebene
- **Test der DTL**
- **Source & Target Felder** können unabhängig voneinander oder gemeinsam gescrollt werden
- **Layout Umschaltung** – Vertikal
- **Nützliche Funktionen für Entwickler**
 - Copy/Paste DTL Anweisungen mit Multi-Select Unterstützung (zur selben oder anderer DTL)
- **Und mehr**



Interoperabilität – Weitere UX Features in 2025.3



Ens.Alert Stopped ⓘ

- Host Inactive
- Host not running, enabled
- Host Running
- Host Disabled
- Host Error
- Host Retrying
- Production Running
- Production Suspended
- Production Stopped
- Production Troubled

Production GHMDPKG.FoundationProduction

Search: AND port:34958

Inbound **Host** **Category** **RuleSet** **DTL** **IP Address** **Port** **Outbound Hosts**

Hosts

- TCPHL7
- TCPHL7_Router
- X12FileInbound
- X12FileInbound_Router

RuleSets

Process Hosts

Filter by hosts, categories, rules, transforms...

Enable **Disable** **Delete** **Restart**

- ClinicABC_Router (1)
- Ens.Alert
- LabXYZ_Router (1)

Production HL7PKG.GHMD

Filter by hosts, categories, rules, transforms...

Inbound Hosts **Process Hosts** **Outbound Hosts**

HL7FileService (1)

Ens.Alert

MsgRouter (1)

adMessageHandler (1)

MailAlert (1)

HL7FileOperation (1)

PagerAlert (1)

Editing NewCategory

Properties

Filter Properties...

Name*

NewCategory

Included Hosts*

Ens.Alert

Cancel **Save**

Healthcare Interoperabilität (2025.1)



- Bulk FHIR Ingestion, Scheduling, and Integrity checks
 - Direktes Einlesen von großen externen FHIR-Datenmengen direkt in den InterSystems FHIR Server
- FHIR-Konformität für den Massenzugriff
 - Aktualisierungen von Webservice Endpunkten
- FHIR Search and Operations
 - Zusätzliche Werkzeuge für eine vereinfachte Datenabfrage

Healthcare Interoperabilität (2025.3)



- Bulk FHIR Coordinator
 - Deutliche Performancesteigerung durch konfigurierbare Anzahl von Threads
- FHIR Search and Management
 - Neue und verbesserte Funktionalitäten
- FHIR as a Service
 - Neues AWS-Angebot für FHIR-Server
 - Komplettpaket rund um FHIR

SQL & Data Management 2025.1



- Verbesserter Massenimport von DDL-Anweisungen
 - LOAD SQL
- Neue Syntax für Serverseitige Paginierung
 - LIMIT ... OFFSET und OFFSET ... FETCH
- In-place Konvertierung zwischen Row und Columnar Table Layouts
 - ALTER TABLE ... CONVERT wurde erweitert
- Weitere SQL Funktionen
 - APPROX_COUNT_DISTINCT() für schnelle, geschätzte Ergebnisse
 - HASHBYTES() für gängige Hash-Funktionen

SQL & Data Management 2025.2



- Smarter table statistics, neuer Task
- Table Partitioning
- Erweiterte Pushdown Fähigkeiten für Foreign Tables
 - functions, aggregates, grouping, und ordering Klauseln
- Voller Support für gemischte columnar und nicht-columnar Indices, verbesserter SQL-Optimierer

SQL & Data Management 2025.3



- Erweiterte Pushdown Fähigkeiten für Foreign Tables
 - Jetzt auch auf Server-Ebene, z.B. für JOINS mehrerer Tabellen
- Schutzmaßnahmen für Prozessspeicher
 - Besserer Schutz vor <STORE> Fehlern bei komplexen Abfragen
- Verschiedene SQL-Verbesserungen
 - Schnellere Laufzeitstatistiken
 - Zusätzliche Infos im SQL Query Plan
 - Performancesteigerung bei Aggregationen mit Columnar Tabellen



Geändertes Journal File Format

Einführung eines neuen Journaldateiformats, das zwei verschiedene Änderungen umfasst:

- Kompakteres Datensatzformat, das die I/O Bandbreite reduziert
- Verbesserte Skalierbarkeit von **\$increment** in 2025.1

Das bedeutet **Journal Dateien von IRIS 2025.1 können von Instanzen mit älteren Versionen nicht geöffnet werden.**

- Muss beim Upgrade von Mirror Instanzen beachtet werden
- Wenn Applikationscode Journal Dateien direkt ausliest und verarbeitet müssen hier evtl. Anpassungen gemacht werden (\$increment)

→ Mehr Details finden Sie in der [Upgrade Checkliste](#) in der Dokumentation.



**Speed
Scale
Security**



- Schnellere Datenbank-Komprimierung und Defragmentierung
- Download der Mirror-Datenbank
 - Alternative zum manuellen Kopieren
 - Automatische Erstellung auf allen Mirror-Mitgliedern
 - Vereinfachtes Einrichten für kleine und mittelgroße Datenbanken
- Neues ECP-Verwaltungswerkzeug für die Kommandozeile
 - Do ^ECP ermöglicht Verwaltung ohne Management Portal

Speed
Scale
Security

Neue Security Datenbank (2025.2)



- Auslagerung sicherheitsrelevanter Daten bei Upgrade und Neuinstallation
- ACHTUNG: Bestehende Applikationen, die bislang direkt auf die Security Globals zugreifen, müssen modifiziert und **getestet** werden
- Kein direkter Globalzugriff mehr möglich. Zugriff erfolgt nur über eine API
- Eingeschränkter SQL-Zugriff
- Es wird empfohlen, diese Datenbank zu encrypten
- <https://community.intersystems.com/post/advisory-irissecurity-intersystems-iris-20252>
- IRIS Wallet (2025.3)
 - Sichereres Verwalten von Secrets

**Speed
Scale
Security**

OAuth2 Authentifizierung(2025.2)

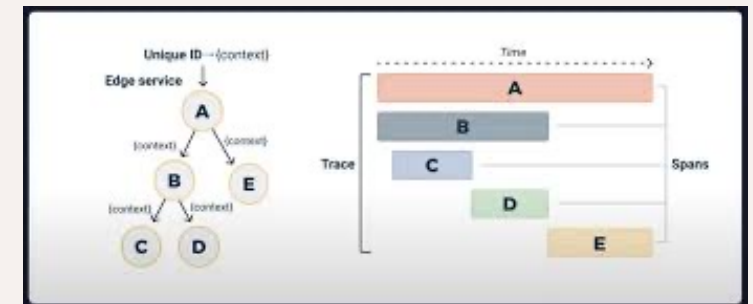


- Nativer Authentifizierungstyp, der sich problemlos für Webanwendungen aktivieren lässt
- Neue OAuth2.ResourceServer Klasse, für vereinfachte Resource Server Konfiguration
- Keine ZAUTHENTICATE Implementierung notwendig
- Authentifizierung zu InterSystems IRIS mit Access Token über JDBC / ODBC

Sonstiges - OpenTelemetry Unterstützung



- **OpenTelemetry** ist ein Standard für hochwertige, allgegenwärtige und tragbare Telemetrie, um eine effektive Beobachtung zu ermöglichen
- **Integrierter OTel-Exporter**
 - Standardisierter Kanal für bestehende Metrik-API und strukturierte Protokollierungsinhalte
 - Exportiert zu jedem OTLP-Kollektor, einschließlich der wichtigsten Observability-Plattformen
- **Einführung der Unterstützung für Trace-Ausgaben**
 - Beschreibt die Schritte und den Zeitplan für die Bearbeitung einer Anfrage
 - Integrierte Basisunterstützung, mit der Möglichkeit, Ihre Anwendungen zu instrumentieren
- **Aktuell nur auf Linux**



Sonstiges



- Vollständige Unterstützung für Kürzungen (Truncate) über alle Datenbankvolumes hinweg (2025.2)
- Neues Character User Interface (CHUI) für Integritätsprüfung (2025.2)
 - ^Integrity Tool
- Zusätzliche Metriken (2025.3)
 - Process Information, ECP-Status, Write Daemon
 - Daily System Performance Collection Service
 - <http://localhost:8080/iris/api/monitor/metrics>
 - Start time und parent process ID in %SYS.ProcessQuery

Vielen Dank

Gerne beantworte ich im Anschluss Ihre Fragen. Bitte sprechen Sie mich an.

